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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,586	02/22/2006	Josep Barrios Villa	B31359US	2863

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EXAMINER	
JOHNSON, MATTHEW A	

ART UNIT	PAPER NUMBER
3656	

MAIL DATE	DELIVERY MODE
11/07/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/551,586	VILLA ET AL.	
	Examiner	Art Unit	
	MATTHEW JOHNSON	3656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 July 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" "**comprising**" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "**The disclosure concerns**," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 2, 4, 6 and 8-13, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillet (USP-4,637,741) in view of Masuda et al. (DE-198 48 289).

Re clm 1: Gillet discloses a self locking shaft comprising:

- A shaft portion (7)
- A head portion (11) integrally connected with the shaft portion (Fig. 2), the head portion being suitable to mount the shaft at a support (5, 6, Fig. 2), the head portion comprising a resilient clip (20, 21), which is suitable to be latched with the support (6) during a rotational mounting motion of the shaft with respect to the support (C2 L50-65)
- The clip being provided as a resilient strap (Figs. 2 & 4), which extends from a portion (near 19) of the head portion
- Wherein the clip is connected to said portion of the head portion at one side of the clip only (Fig. 2)
- Said portion of the head portion being a cup-shaped portion having a cylindrical surface which is coaxially aligned with the shaft portion (Figs. 2 & 4)
- Said resilient clip radially extends to the outside tangentially with respect to the cylindrical surface of the cup-shaped portion (Fig. 2)
- The clip is integrally connected to the cup-shaped portion at a connection line (19), which is axially oriented with respect to the shaft (Fig. 2)

Gillet does not disclose said cup-shaped portion comprises at least two clips.

Masuda teaches a cup-shaped portion (3) comprising at least two clips (5) for the purpose of increasing the strength of the connection.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified the device of Gillet such that the cup-shaped portion comprises at least two clips, as taught by Masuda, for the purpose of increasing the strength of the connection.

Re clm 2: Gillet discloses the clip (20, 21) comprises a rectangular shape and an axially curved radial top surface (Fig. 4).

Re clm 4: Gillet discloses the shaft comprises a handle area (12) at the head portion. Regarding the limitation, "for manual assembly of the shaft in the support without tools" the examiner notes while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. The reference discloses all claimed structural limitations and therefore anticipates the claim. (See MPEP 2114)

Re clm 6: Gillet discloses a structure comprising a support (5, 6) said structure comprising a cylindrical socket (15) which is integrated within the support; and at least one latching window (23), the latching window is radially introduced into the cylindrical wall of the socket (Fig. 4).

Re clm 8: Gillet discloses the socket of the support (6) further comprises at least one axially curved recess (23).

Re clms 9 and 10: A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order

to patentably distinguish the claimed invention from the prior art. The prior art structure is capable of performing the intended use and therefore meets the claims.

Re clms 11-13: Gillet discloses the method of assembly comprising inserting the shaft (7) in an axial direction into a corresponding socket (15) within the support (5, 6); rotating the shaft around its rotational axis, until clips (20, 21) which extend radially from the shaft, snap into the latching window (23) within the socket, wherein the rotation of the shaft is performed around an angle less or equal to 90 degrees (C2 L50-65, see also Fig. 4).

4. Claims 3 and 7, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillet (USP-4,637,741) in view of Masuda et al. (DE-198 48 289) further in view of WO 94/07040.

Re clm 3: Gillet does not disclose the shaft comprises a pin, which is connected to the head portion in an axial direction and which secures the shaft after assembly.

WO 94/07040 teaches a shaft (70) comprising a pin (98) connected to a head portion (95) in an axial direction for the purpose of guiding and supporting the shaft.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified the shaft of Rouviere to comprise a pin, which is connected to the head portion in an axial direction and which secures the shaft after assembly, as taught by WO 94/07040, for the purpose of guiding and supporting the shaft.

Regarding the limitation, “which secures the shaft after the assembly from undesired rotation" the examiner notes while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. The reference discloses all claimed structural limitations and therefore anticipates the claim. (See MPEP 2114)

Re clm 7: Gillet does not disclose said support comprising a pin guidance, which is provided as a curved elongated hole.

WO 94/07040 teaches a support (97) comprising a pin guidance (96), which is provided as a curved elongated hole (Fig. 34) for the purpose of guiding the rotation of the shaft during assembly.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified the device of Gillet in view of Masuda to incorporate a pin guidance, which is provided as a curved elongated hole, as taught by WO 94/07040, for the purpose of guiding the rotation of the shaft during assembly.

5. Claims 1, 2, 4 and 5, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Rouviere (FR-2 796 012) in view of Masuda et al. (DE-198 48 289).

Re clm 1: Rouviere discloses a self locking shaft comprising:

- A shaft portion (8)
- A head portion (13,14) integrally connected with the shaft portion (Fig. 2), the head portion being suitable to mount the shaft at a support (4,5), the

head portion comprises a resilient clip (25), which is suitable to be latched with the support (5) during a rotational mounting motion of the shaft with respect to the support (5)

- The clip being provided as a resilient strap, which extends from a portion (near 14) of the head portion
- Wherein the clip is connected to said portion of the head portion at one side of the clip only (Figs. 1-4)
- Said portion of the head portion being cup-shaped portion having a cylindrical surface (outside of 14) which is coaxially aligned with the shaft portion
- Said resilient clip radially extends to the outside tangentially with respect to the cylindrical surface of the cup-shaped portion
- The clip is integrally connected to the cup-shaped portion at a connection line (any line on outer surface of 14 near clip 25), which is axially oriented with respect to the shaft

Rouviere does not disclose said cup-shaped portion comprises at least two clips.

Masuda teaches a cup-shaped portion (3) comprising at least two clips (5) for the purpose of increasing the strength of the connection.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified the device of Rouviere such that the cup-shaped portion comprises at least two clips, as taught by Masuda, for the purpose of increasing the strength of the connection.

Re clm 2: Rouviere discloses the clip comprises a rectangular shape and an axially curved radial top surface (Fig. 2).

Re clm 4: Rouviere discloses the shaft comprises a handle area (outer surface of 14) at the head portion. Regarding the limitation, "for manual assembly of the shaft in the support without tools" the examiner notes while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. The reference discloses all claimed structural limitations and therefore anticipates the claim. (See MPEP 2114)

Re clm 5: The limitation "the shaft and a plurality of said shaft components comprise a molded plastic material" is a product-by-process claim and is not given patentable weight in an apparatus claim (See MPEP 2113). Additionally, it would have been obvious to a person having ordinary skill in the art at the time of the invention to form the parts of a plastic material for the purpose of reducing weight.

Response to Arguments

6. Applicant's arguments filed 7/15/2008 have been fully considered but they are not persuasive. Applicant argues that Gillet does not disclose:

- A clip being provided as a resilient strap
- The clip being connected to the head portion at one side of the clip only
- A portion of the head portion to which the clip is connected is a cup-shaped portion

- The clips radially extending to the outside in a tangential direction with respect to the cylindrical surface of the cup-shaped portion
- The clips connected to the cup-shaped portion at a connection line which is axially oriented with respect to the shaft

As described above, Gillet discloses a clip (20, 21) being provided as a resilient strap (C2 L29), the clip being connected to the head portion (11) at one side of the clip only (one side being near 21, the other side being near 20, the clip is connected to 11 at 20, see Fig. 2), a portion (near 19) of the head portion (11) to which the clip is connected is a cup-shaped portion (Fig. 2), the clip (20, 21) radially extending to the outside in a tangential direction with respect to the cylindrical surface of the cup-shaped portion (Fig. 2), and the clip connected to the cup-shaped portion at a connection line (19) which is axially oriented with respect to the shaft (Fig. 2).

Applicant further argues that there is no motivation to combine Masuda's teaching of adding an additional clip to the device of Gillet. As described above, Masuda teaches a cup-shaped portion (3) comprising at least two clips (5) for the purpose of increasing the strength of the connection. Additionally, the duplication of essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v, Bemis Co., 193 USPQ 8.*

Applicant further argues that Masuda does not disclose some of the structure that has already been disclosed by Gillet. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re*

Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Masuda is cited only for his teaching of providing two resilient clips instead of one. The remaining structure is disclosed by Gillet as described above.

Applicant's arguments regarding the rejection based on Rouviere in view of Masuda are unclear because Applicant refers to Gillet when discussing the alleged deficiencies in the rejection. It is assumed that the arguments were intended to be directed towards Rouviere.

Applicant argues that Rouviere does not disclose:

- A cup-shaped portion having a cylindrical surface which is coaxially aligned with the shaft portion
- A cup-shaped portion comprising at least two clips
- Resilient clips radially extending to the outside in a tangential direction with respect to the cup-shaped portion
- The connection line of the clips with respect to the head portion is axially oriented with respect to the shaft

As described above, Rouviere discloses a cup-shaped portion (13, 14) having a cylindrical surface (outside surface of 14) which is coaxially aligned with the shaft portion (8, Fig. 2), a resilient clip (25) radially extending to the outside in a tangential direction with respect to the cup-shaped portion, the connection line (any line on outer surface of 14 near clip 25) of the clip is axially oriented with respect to the shaft. The limitation, "the cup-shaped portion comprising at least two clips", is taught by Masuda

as described above for the purpose of increasing the strength of the connection. Additionally, the duplication of essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v,* Bemis *Co., 193 USPQ 8.*

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW JOHNSON whose telephone number is (571)272-7944. The examiner can normally be reached on Monday - Friday 9:00a.m. - 5:30p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew Johnson/
Examiner, Art Unit 3656

/Richard WL Ridley/
Supervisory Patent Examiner, Art Unit 3656